

# The Findings of Focus Group Study on Independent Learning in A Digital Age

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**Abstract:** All students need to learn independently, yet the fast-changing world, especially with technology, creates many obstacles. In major cities like Hong Kong, where institutions vigorously promote contemporary educational patterns, the problem is more complicated and serious. Given the abundance of technologies, it is vital to understand how Hong Kong university students view independent learning and their expectations for its use in the digital age. The CUHK Independent Learning Centre (ILC) has been operating for over 30 years. Extending the language centre model makes this centre special. The ILC surveyed CUHK students in 2022 to learn about their opinions on autonomous studying and their expectations for help. A follow-up focus group study has been conducted to clarify the results and verify the first analysis by blending qualitative insights with the mostly quantitative findings. The principal objectives of the focus group study are to explore the viewpoints of students and aid ILC in improving its support for student needs. Students who completed the survey were invited to meet ILC hosts in 2023. Students discussed numerous issues with two ILC lecturers. All discussions were taped and transcribed into Word. Thematic analysis of student interview replies was done using QualCoder V3.5. Further content analysis showed that student perspectives fall into four main themes and different sub-themes, with a total of 480 instances recorded. The interpretation demonstrated that students comprehend independent learning, its concept, its practice at CUHK, self-efficacy, technology use, teacher assistance, and future support. Many students appear self-aware and secure in learning. They appear prepared to define independent learning in a digital age and traverse an information- and technology-rich environment. Although survey and focus group results varied on how significant in-person instruction by educators is in autonomous learning, focus group findings generally agree with survey results. In general, the assessment of both findings shows that most CUHK students enjoyed independent study.

**Keywords:** Independent Learning, Focus Group Study, Higher Education in Hong Kong, Independent Learning Effectiveness, Student Perception

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## 1. Introduction

Independent learning is crucial for all learners, as it fosters critical thinking, self-regulation, and lifelong learning skills. However, the rapidly changing world, particularly the swift advancement in technology, has introduced numerous challenges for learners striving to practice effective independent learning. This situation is particularly complex in metropolitan areas like Hong Kong, where universities actively promote the adoption of the latest educational trends and technologies. Moreover, The COVID-19 pandemic necessitated a sudden shift to online learning, which exposed several challenges. The social isolation resulting from the pandemic is widely regarded as a significant factor contributing to the increased use of online platforms for independent learning. Michael K. Ponton contended that independent learning does not necessarily correlate with social isolation. Independent learning transpires when an individual enrolls in and engages with a college course perceived to offer personal fulfilment. Independent learning denotes the interactive and emergent agency that recognizes the relationships among the individual, environment, and activities via self-efficacy assessment. (Ponton, 2006, P.46) Students frequently reported experiencing challenges in adjusting to online formats, frequently feeling exhausted by the absence of structured guidance and interaction that are present in traditional classroom settings. This transition underscored the necessity for students to cultivate independent learning skills, a skill that many were not yet familiar with before the pandemic.

Even though universities in Hong Kong encourage independent learning and the use of technology, students frequently find themselves inadequate for the expectations that accompany these initiatives. Students may experience feelings of confusion and frustration because of the absence of in-class interaction and support, as they may be unsure of how to effectively employ the available technology for their learning. The Independent Learning Centre (ILC) at the Chinese University of Hong Kong (CUHK) has been established for more than three decades. It provides various services, including workshops, self-learning materials, talks, and student events, to support students' academic requirements and enrich their understanding of different subjects. In order to gain a deeper understanding of CUHK students' perspectives and reflections on independent learning, as well as their expectations about assistance for independent learning, the ILC conducted a survey in 2022 to gather input. The title of the survey is "The Survey of the Effectiveness of Independent Learning", and it was the first formal study on student's perception and expectations on independent learning in Chinese University of Hong Kong. The purpose of this survey is not just to find out the needs or preference of CUHK students on independent learning

but also aims at providing valuable information for the relevant parties to better assist students in facing campus challenges and future endeavours.

The study of the survey examines users' perceived needs, expectations, and self-efficacy in the context of independent learning. Of the 221 valid responses from undergraduate and postgraduate students, over half indicated agreement that the University fosters a conducive independent learning environment and reported successful experiences in independent learning. Participants rated the Independent Learning Centre favourably; they engaged in the workshops and consultation sessions and utilized the resources provided or recommended by the Centre to support their independent learning. This study not only exemplifies the facilitation of independent learning in higher education institutions but also carries pedagogical implications. The survey reveals university students' perceptions of independent learning in the 21st century and defines the characteristics of a successful independent learner. Participants credit their success to the formulation of learning goals and strategies, which they progressively achieve through sustained self-motivation and suitable guidance from teachers. The findings of the study indicate that independent learning in contemporary pedagogy must include suitable assessment and teacher support. Furthermore, independent learning at the university level may extend beyond language acquisition. However, our findings indicate that some students particularly favour independent learning in skills pertinent to public examinations and specific elements of academic writing. Consequently, universities should not only provide support for language acquisition but also expand the principles of independent learning to encompass additional educational dimensions, thereby fostering a more viable and enduring future for independent learning. (Chao et al, 2023, P.47-48)

To further explore the result and the meaning of the findings, a subsequent focus group study that can complement the predominantly quantitative outcome with a qualitative outcome was conducted.

## **2. Reasons for Conducting a Focus Group Study on an Independent Learning Survey**

A more comprehensive understanding of the motivations behind all survey responses can be achieved through a focus group study. Surveys are efficient at quantifying public opinion or behaviour; however, they frequently fail to clarify the underlying causes. Morgan (1997, P.3) contends that focus groups are particularly effective for examining complex subjects and understanding the rationale behind discerned trends in quantitative data. Focus groups can produce comprehensive, descriptive data that clarifies the rationale behind survey findings, as emphasized by Krueger and Casey (2009, P.19). Researchers can examine the reasoning behind survey replies via focus groups. The quantitative results can be clarified by the motivations, perspectives, and convictions expressed during participant conversations.

Survey data may occasionally be abstract or lacking in context. Liamputtong (2011, P.2-4) argues that focus groups provide researchers with a more comprehensive understanding of the ways in which individuals' beliefs and behaviours are influenced by their experiences and social contexts, as opposed to surveys alone. Wilkinson (1998, P.341-342) contends that focus groups are essential for the analysis of the context of attitudes and beliefs. A venue for contextualizing findings by examining real-life experiences and viewpoints is provided by focus groups. This can help researchers understand the relationship between survey responses and the daily lives of participants, as well as the broader social context.

Focus groups are more exploratory in nature, while surveys are methodically constructed to evaluate certain concepts. Morgan (1997, P.6) stresses the exploratory nature of focus groups, which enables the identification of unexpected insights and the development of innovative research inquiries. The interchange of opinions may deviate from the scheduled questions as the discussion progresses, indicating that a focus group can uncover unexpected themes, perspectives, or issues that were not initially considered in the survey design. This could result in a more profound comprehension of the subject matter and innovative research opportunities.

Occasionally, survey queries may be misinterpreted, leading to ambiguous or perplexing results. Powell et al. (1996, P206) suggest that focus groups can be implemented to clarify the significance of survey questions and responses, thereby allowing researchers to interpret the data in a suitable manner. Focus groups enable the clarification of ambiguity through investigating and follow-up inquiries. Focus groups offer a method to address these misunderstandings by explicitly questioning participants about their understanding of specific questions or concepts.

By combining surveys with focus groups, data triangulation is facilitated, thereby improving the dependability and validity of the research results. Flick (2018, P.542-543) emphasizes the importance of triangulation in qualitative research, particularly the integration of surveys and focus groups, to improve the dependability and

validity of the results. The validity of the research is improved by triangulation, which provides a variety of perspectives on the same phenomenon. The conclusions are more robustly supported when qualitative and quantitative data converge.

In summary, focus groups offer a more comprehensive, contextual, and exploratory comprehension of the data, thereby significantly improving survey research. They help researchers in the following ways: clarifying the fundamental rationale of phenomena, identifying unforeseen discoveries, resolving uncertainties, formulating new hypotheses, triangulating data, and verifying findings. Consequently, this will facilitate the primary objectives of attaining a more comprehensive understanding of students' perspectives on independent learning and enabling the ILC to improve its support for student needs.

### **3. Process and Research Method of the Focus Group Study**

In 2023, students who had completed the survey were granted the opportunity to partake in in-person interviews with ILC hosts. The students were guaranteed that all submissions would be treated with the utmost confidentiality and that the research team would exclusively use them for the purpose of research and publication in the invitation. Sharing from the students will not have any impact on their GPA at the university, as this initiative is a component of the non-formal education curricula. All information will be stored in a secure location at the Independent Learning Centre (ILC) for a maximum of five years. Even if the students have given their consent, they may subsequently change their mind and withdraw it by writing to the ILC. They may also contact The Survey and Behavioural Research ethical Committee of the Chinese University of Hong Kong (CUHK) if they have any concerns regarding the ethical issues.

A total of 19 students participated in the study, divided into five groups. Ten questions in four categories have been prepared to facilitate the discussion (\*please see Appendix 1 for the questions), which is limited to one hour each group. Guided by two ILC teachers, students addressed the prepared questions to engage in debates and articulate their perspectives on several themes pertaining to independent learning.

The interviews were conducted in English and have been recorded. A part-time assistant has since been employed to transcribe all recordings. The data acquired from these interviews were processed utilizing Qualitative Data Analysis (QDA) technology, especially QualCoder V3.5. Qualitative Data Analysis (QDA) technologies offer a systematic framework for the management and examination of extensive qualitative data, guaranteeing meticulous and transparent analytical procedure. (Miles, 2019, P.6-P11.) This grounded theory enables the researcher to initiate a study without the necessity of testing a hypothesis. Instead, it enables her to formulate hypotheses by attentively considering the statements of the research participants. The process is referred to as hypothesis-generating research, as it entails formulating hypotheses post data collection, rather than hypothesis-testing research. The grounded theory method emphasizes two fundamental principles: (1) inquiry instead of quantification, and (2) hypothesis generation through theoretical coding. (Auerbach & Silverstein, 2003, P.19) Following this approach, the using of QDA for theoretical coding facilitates the organization of material into digestible chunks, hence enhancing navigation and retrieval of pertinent information. Moreover, theoretical coding technologies like QDA, streamline the coding process, enabling researchers to annotate data segments with pertinent codes, hence aiding in the identification of recurring themes and patterns for building an abstract theoretical understanding of the studied experience. (Charmaz, 2025, P.5).

QualCoder V3.5 has been employed in this research to do theme analysis, enabling a thorough evaluation of student responses to the interview questions.

### **4. Result of the Qualitative Data Analysis (QDA)**

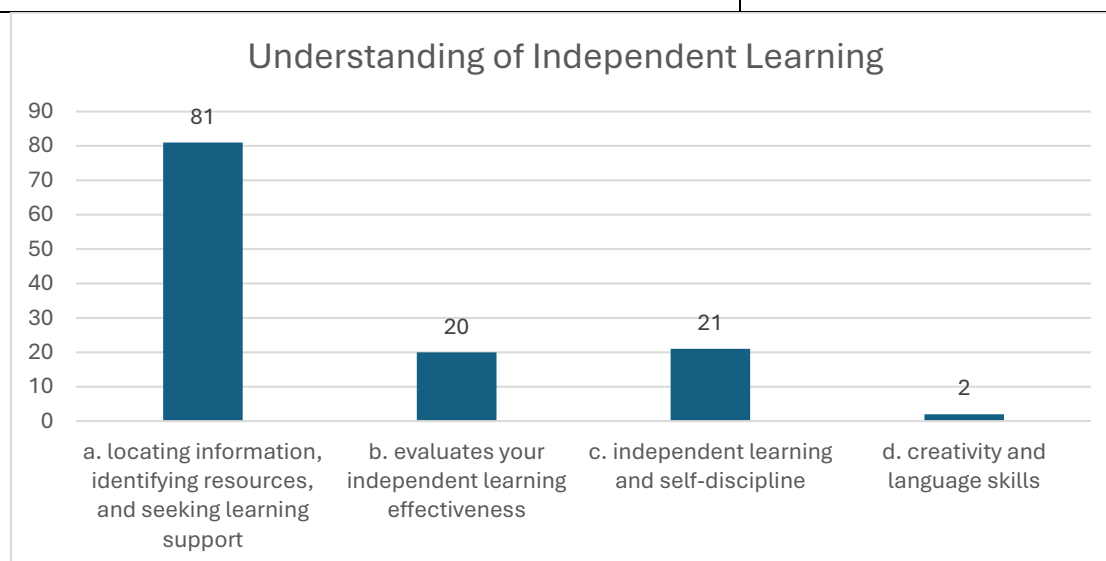
When it comes to managing and analysing vast amounts of qualitative data, QDA technologies offer a standardized framework that assists in this process (Miles, 2019, P.6-P11.) The data may be organized into more manageable chunks with the assistance of these technologies, which makes it simpler to navigate and retrieve information that is relevant. In addition, QDA tools make the process of coding easier by enabling researchers to tag specific sections of data with appropriate codes. This, in turn, assists in the identification of concepts and patterns that appear repeatedly (Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). SAGE Publications). Analysing the transcripts with QDA tool: QualCoder V3.5, it was discovered that the opinions of the students that were gathered from the focus group could be classified into a variety of main themes and sub-

themes. There are two to five sub-themes associated with each main topic, and a total of 480 documented instances have been assigned to each of these sub-themes.

The first main theme is “Understanding of Independent Learning”. It has encompassed 124 recorded instances, categorized into four sub-themes. Mostly, these instances refer to students seeking suitable information or resources and seeking learning support. Students also find self-evaluation and self-discipline are crucial component of independent learning.

**Table 1: Main theme: Understanding of Independent Learning**

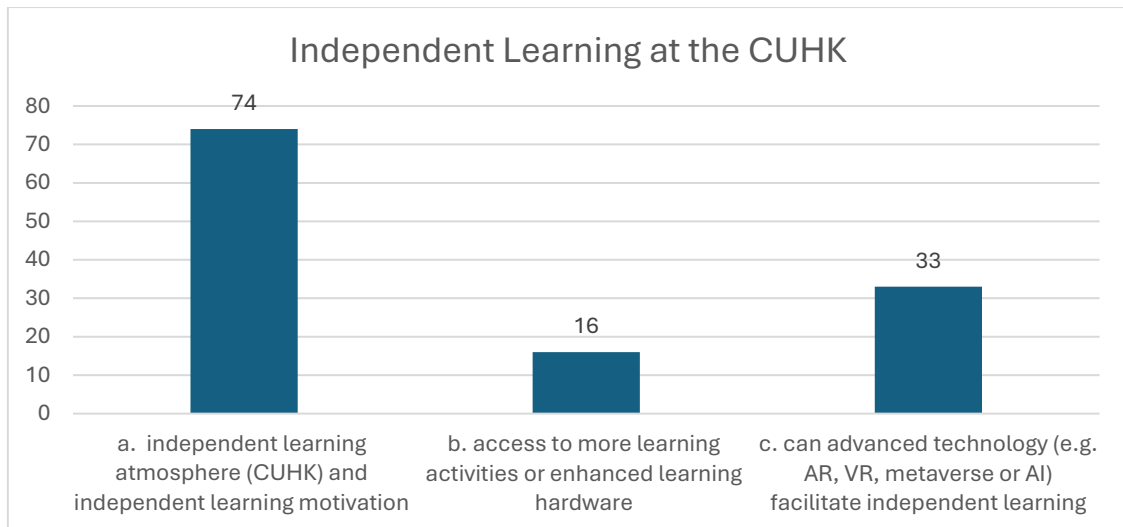
| 1.Understanding of Independent Learning (30%)                                | Coding Result (Instances) |
|------------------------------------------------------------------------------|---------------------------|
| a. locating information, identifying resources, and seeking learning support | 81                        |
| b. evaluates your independent learning effectiveness                         | 20                        |
| c. independent learning and self-discipline                                  | 21                        |
| d. creativity and language skills                                            | 2                         |
| Total                                                                        | 124                       |



The second main theme is “Independent Learning at the Chinese University of Hong Kong (CUHK)”. It has encompassed 123 recorded instances, categorized into three sub-themes. Many students acknowledged that CUHK fosters positive independent learning and regard themselves as moderately to highly motivated independent learners. Students often express concerns on the utility of advanced technologies, such as AI and enhanced learning hardware, in enhancing their learning effectiveness.

**Table 2: Main theme: Independent Learning at the Chinese University of Hong Kong (CUHK)**

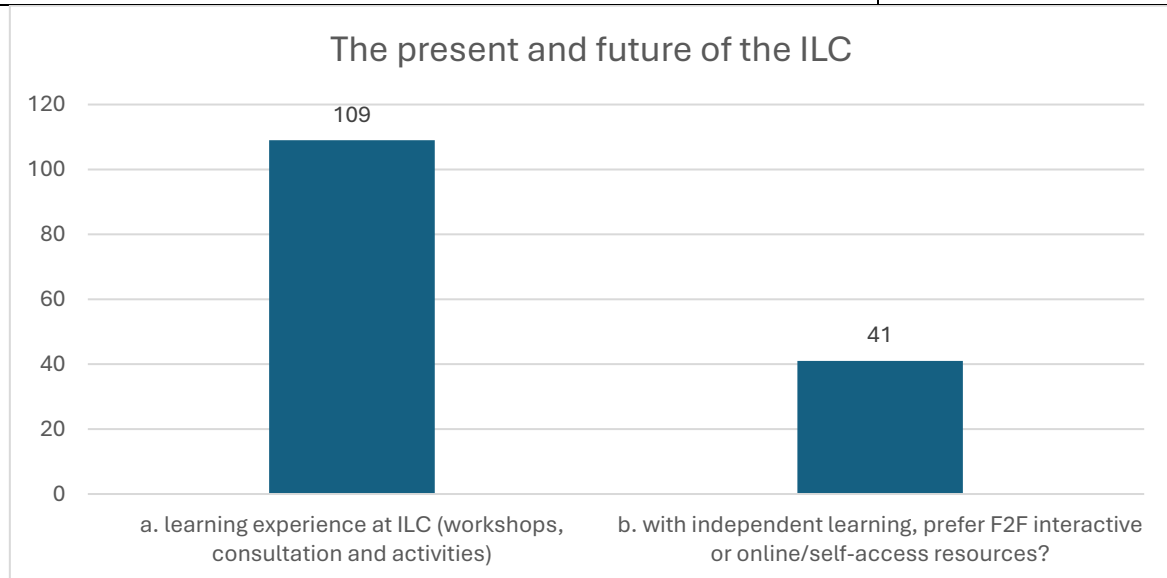
| 2. Independent Learning at the CUHK (30%)                                                 | Coding Result (Instances) |
|-------------------------------------------------------------------------------------------|---------------------------|
| a. independent learning atmosphere (CUHK) and independent learning motivation             | 74                        |
| b. access to more learning activities or enhanced learning hardware                       | 16                        |
| c. can advanced technology (e.g. AR, VR, metaverse or AI) facilitate independent learning | 33                        |
| Total                                                                                     | 123                       |



The third main theme is “The present and future of the ILC”. It has encompassed 150 recorded instances, which is highest among the four themes, and all the instances could be categorized into two sub-themes. Students were eager to discuss the learning activities they engaged in at ILC and their perceptions of the experience. Some of them choose to discuss their preference towards independent learning with teacher guidance, peers, or online/self-access resources.

**Table 3: Main theme: The present and future of the ILC**

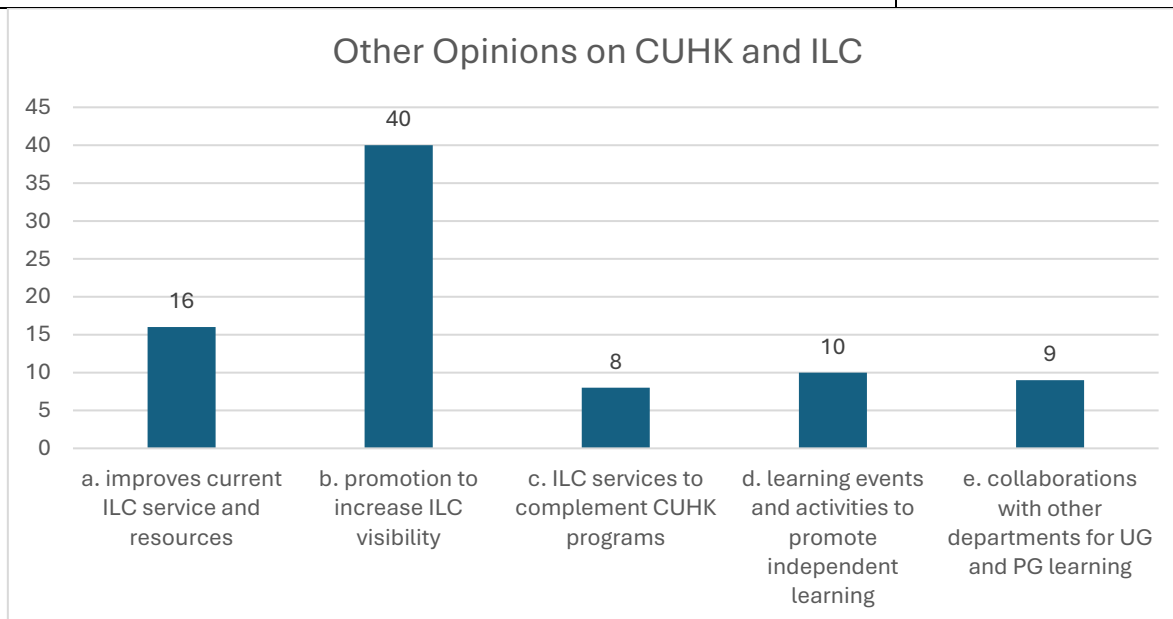
| 3. The present and future of the ILC (30%)                                            | Coding result (Instances) |
|---------------------------------------------------------------------------------------|---------------------------|
| a. learning experience at ILC (workshops, consultation and activities)                | 109                       |
| b. with independent learning, prefer F2F interactive or online/self-access resources? | 41                        |
| Total                                                                                 | 150                       |



The fourth main theme is “Other Opinions on CUHK and ILC”. It has encompassed 83 recorded instances, categorized into five sub-themes. The distribution of instances suggests that students consider ILC highly beneficial and desire enhanced promotion of it. They also expect continuous improvement of services and resources on ILC, along with more chances for independent learning engagement.

**Table 4: Main theme: Other Opinions on CUHK and ILC**

| 4.Other Opinions on CUHK and ILC                                  | Coding result (Instances) |
|-------------------------------------------------------------------|---------------------------|
| a. improves current ILC service and resources                     | 16                        |
| b. promotion to increase ILC visibility                           | 40                        |
| c. ILC services to complement CUHK programs                       | 8                         |
| d. learning events and activities to promote independent learning | 10                        |
| e. collaborations with other departments for UG and PG learning   | 9                         |
| Total                                                             | 83                        |



## 5. Discussion

Based on the results of the QDA, it appears that students at CUHK have a profound understanding of independent learning and anticipate receiving support from the teacher. Students assert their accountability for establishing their own learning objectives and strategies; nonetheless, they highly value the direction and support provided by their teachers, as indicated by the insights gathered from focus groups. One student from the study group stated, “My understanding about independent learning is that this learning is that you decide on what you want to learn and how much you want to reach, and the decision are made by yourself.” (Informant A) Similar sentiments can be observed among other participants of the focus group. The ability to determine your own learning objectives and areas of concentration undoubtedly demonstrates autonomy and control over one's educational journey, a notion supported by numerous scholars as a significant component of independent learning (Chan, 2011) Many concurred that independent learning entails attaining one's educational objectives by identifying appropriate information and resources. A student remarked, “I do agree that being able to locate like suitable resources or seek help when necessary is part of the independent learning. Because if you cannot locate the suitable resources, you are going towards the wrong direction, which you may get lost in it and feel very like you do not know how to begin with all the help.” (informant B) Nonetheless, educator assistance is considered essential throughout the entire process of autonomous learning, particularly when establishing personal learning objectives. Informant A remarked: “when I come to this place, I find that all the learning objectives are set by yourself. So the teacher will give the advice according to the learning objective of yourself. So I think the advice is more personalized.” (informant A) The guidance appears to be more individualized. Teacher guidance can identify individual needs, which is fundamental to independent learning and is crucial for addressing difficulties and challenges, as noted by informant B: “I think during the learning process, we may face a lot of problems or difficulties. So some you can, like solve it by yourself, but some you may need more support from the seniors. So I think this is crucial for independent learning.” These understandings regarding independent learning align with the survey's findings in which students view independent learning as the active reflection and systematic attainment of their learning goals. They believe that a successful independent learner

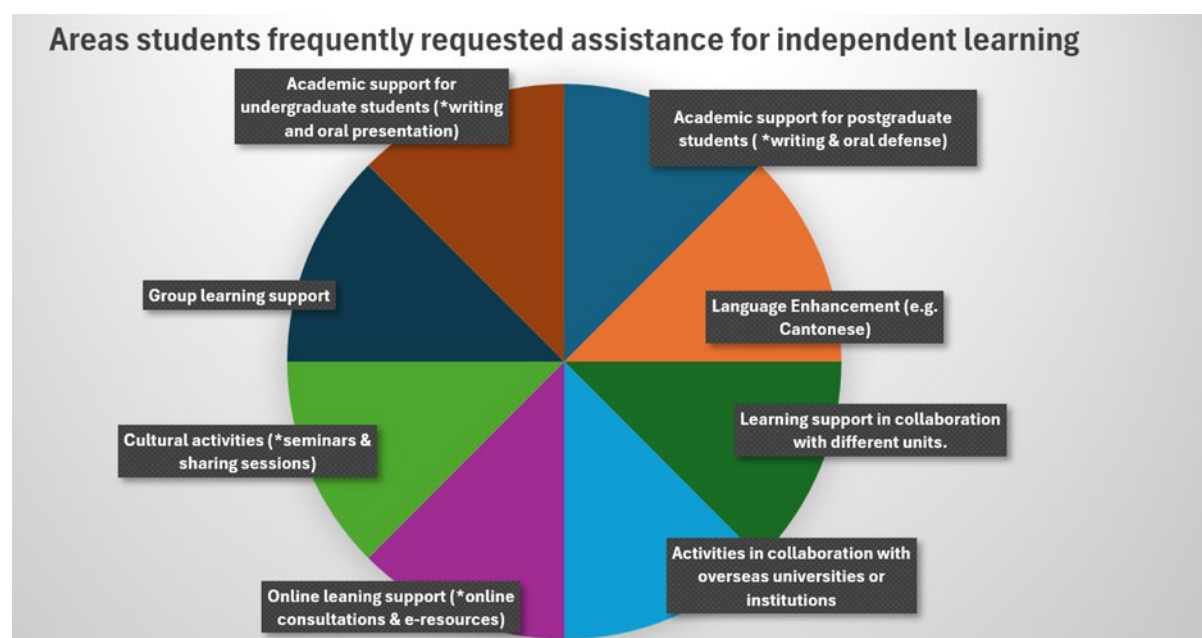
must exhibit a strong motivation to reflect on their own learning needs. The survey results reveal that students favour self-directed learning with teacher guidance as the optimal method of independent learning (Chao et al, 2023, P.46-47)

The QDA results also revealed that students perceive self-discipline, which refers to self-determination, because of self-motivation and as a crucial component of effective independent learning. The results of this survey align with the results from the previous survey. The study's findings indicate that students believe that a high level of motivation is essential for effective autonomous learning and self-reflection on their educational needs. (Chao et al, 2023.P.46-47) One of the students from the group stated, "I think self-discipline is definitely important, but that could be... I think it's also related to our motivation. If you have a very strong motivation, then of course you will be very disciplined. You will spend time every day to do some preparation for yourself early" (Informant C) While Some students exhibited doubt regarding the correlation between self-discipline and self-motivation, while others firmly believe in a link between the two. A student remarks, "I think self-disciplines is a result due to self-motivation. Because I think I have the motivation to learn something, but I have only the motivation. For example, today I have the motivation and tomorrow I don't. Another parties or the school to help us is to form a systematic way, or to help us to keep that motivation and keep that discipline. It's providing us the regular time to meet up, to learn new things. That's the way to help to balance motivation." (Informant D) Self-discipline's capacity to motivate and regulate oneself to achieve a specific goal through the effective utilization of time, energy, and resources aligns with the principles of self-determination theory (SDT). SDT posits that students who perceive their learning as self-determined or autonomous regard their studying as a self-chosen, volitional act that reflects their individual aspirations and views. (Willems and Lewalter, 2012, P3098-3100) Self-determination is considered essential not just for sustaining motivation but also to achieve one's established learning objectives. One of the students stated that "I agree with him that set goal is very important. It's like the end. You need to know where you want to go, but the self-discipline is like the process. So, when you set a goal, you definitely need to be self-disciplined to go through this road." (Informant E) Consequently, we assert that all autonomous learners should reflect on their self-determination to attain effective and successful learning outcomes.

While numerous instances about student's learning experience and independent learning at CUHK indicate that they acknowledge the integration of emerging technologies, such as VR and AI, as an important development that can enrich educational experiences, most students also regard effective guidance from teachers as crucial for maximizing the advantages of these tools. In certain instances, students asserted that such guidance is essential for the effective execution of independent learning, student remarked, "I think advanced technology is beautiful because I'm an economics student. So maybe when I learned the math, instead of just memorizing the formula blindly, maybe I want to see the method, the step-by-step proof. If I Google or find a textbook, it will take me one hour to find the relevant one. For example, if there's relevant AI, I can just ask them the question: Can you please prove this formula for me? And then they will do it for me. So they will do the calculation. I think also for medical students, I'm not sure, but this is what I've heard before, I think they need to look at the diagram and stuff, so maybe if they use a VR or a large screen to make it very big, it will make them remember it better. I think if technology is used in the right way, it can help students save a lot of time and improve their learning." (Informant F) Student emphasized the substantial educational advantages of modern technologies. Technologies such as VR and AI can accurately and effectively demonstrate intricate processes, uncover hidden and challenging-to-observe areas, and allow students to tailor and engage with them based on their personal tastes and behaviours. Thus, they are unequivocally "beautiful" instruments. However, student also believe we should exercise caution in utilizing technology for learning "I think maybe we need to be careful. As I mentioned, we can learn with enjoyment, but we can't learn to enjoy it. I think I'm worried that if we involve too much AR, VR most advanced technology because it has very good potential to be an entertainment equipment instead of a learning equipment. Maybe we will lost in some games or videos instead of learning itself." (Informant G) Informant G has pointed out that the issue of learning with technology lies in the potential erosion of focus or objectives, so reducing education to mere pleasure, hence, informant G would recommend "instead of we purchase more AR/ VR equipment, maybe we need to involve more tutors or just more experienced educators. I mean just more experienced tutors so we can better feed the knowledge instead of feeding the knowledge by some video or by some tool...It can be an assistant, but it can't be a very major part of your learning process. So that's my opinion. I think we need to be careful with it." In this era, students are inherently inclined to use technology for learning. However, guidance from teachers or peers is crucial. A student expressed, "I think activities like the teachers or professors or the peers, they could help me to define what I need and give me some guidance. If there is some hardware to support, to add some reality, it's also great. But it's not necessary." (Informant H) The student has observed that it is also advantageous to have hardware available that improves realism. Nevertheless, it is not required. Another student stated that: "sometimes I think it's about going back

to the very basics and doing like the most simple and straightforward ways of finding help. And for me personally, I think that's like having workshops, doing interactions" (Informant I) Other students have expressed similar opinions as they have found genuine human connection activities, such as workshops and consultations, are more fundamental and direct for learning, thus superior. One of the most significant findings of the independent learning survey is that students prioritize teacher guidance over technological alternatives. (Chao et al, 2023, P.46-47) The survey results suggested that many students are in favour of CUHK providing a greater variety of learning activities, including both in-person and online activities, as well as all available e-resources for independent learning. They are of the opinion that technology should perform a supportive function in this type of learning environment.

A significant number of students consider the Independent Learning Centre (ILC) essential and advocate for its promotion. A student remarked, "I'm 100% satisfied with the ILC Service because I told... I already said that it not only helped me to gain the knowledge, but I also gained the practical tips. I think that is the life-learning skills I gained." (Informant J) Similar opinion has been expressed by other students on different groups, and it also aligned with the findings of the independent learning survey. The diagram (Figure 1) below, which is based on questions and result from the survey (Chao et al, 2023, P.46-47 & P.49-50), demonstrates that the areas in which students have most frequently requested assistance for independent learning are on practical area such as academic support (\*writing and oral presentation) and life-long learning.



**Figure 1: Areas students frequently requested assistance for independent learning**

This finding is consistent with the data collected from ILC, which indicated that many students participated in the ILC workshops or sought consultations were mainly focus on these two domains. Nevertheless, despite the elevated utilization rate and the abundance of accessible resources, students persist in anticipating further assistance or novel advancements in these two domains in the future. (Chao et al, 2023, P.47) The services and resources of the ILC are seen as highly beneficial and significant; therefore, students have proposed many initiatives, including increased collaboration with different departments, the organization of additional events, and enhanced networking opportunities with professors and tutors to promote and strengthen the ILC.

## 6. Conclusion and Suggestions

In conclusion, the attempt to use focus group studies to further examine the outcomes and implications of the independent survey conducted in 2022 was effective. We can see that the result derived by employing a qualitative research methodology, which is a focus group study, align with the findings of the independent learning survey. Utilizing the QDA tool, QualCoder V3.5, to categories and analyse the instances collected from the focus group study enhances our comprehension and provides robust support regarding CUHK students' perceptions and expectations of independent learning. Students at CUHK have a solid comprehension of independent learning, which highlights the value of both self-determination and the support of educators. The

incorporation of contemporary technology, including virtual reality and artificial intelligence, is regarded as advantageous; yet, students emphasize the importance of preserving a balance between technological engagement and direct human interaction, effective guidance from teachers is considered crucial for navigating challenges and enhancing their educational experience. This conversation illustrates the students' need for a learning environment that not only gives them the ability to take responsibility for their own education but also provides the essential support for them to achieve their goals. There is a collective goal for a more enriched educational experience, which is highlighted by the lobbying for expanded resources and initiatives from the Independent Learning Centre. This further demonstrates their dedication to delivering effective outcomes for independent learning.

The findings of this study suggest that universities should go beyond investments in instructional technology or innovations in course design to promote independent learning. They must strengthen students' self-discipline and autonomy while fostering significant interactions with diverse educational components. The teacher's guidance is essential in this interactive process, fulfilling several functions. Teachers can facilitate improved disciplinary management, evaluate learning outcomes, and promote self-study. They can also aid students in formulating their own learning strategies and reflecting on their educational accomplishments. Therefore, even in a learning environment that extensively uses teaching technology, teacher guidance remains crucial for fostering independent learning.

Although the research has yielded significant insights, it is crucial to recognize limitations. The sample size was limited, perhaps restricting the ability to be generalized of the results. The initial objective was to enlist a minimum of 25 students for 5 groups, rather than 19. Moreover, while all focus groups have offered excellent insights on nearly all predetermined subjects, few discussions have demonstrated profound contemplation or profound reflection on individual learning skills or strategies. The one-hour discussion period is likely somewhat constrained. Future researchers interested in conducting similar research should mitigate these constraints by broadening the study's scope to encompass bigger and more diverse participants, as well as extending the focus group discussion duration.

## Ethics Declaration

Ethical approval for conducting a "Focus Group Study" on "A Survey for Independent Learning in CUHK" was obtained from the Survey and Behavioural Research Ethics Committee of the Chinese University of Hong Kong (CUHK). The approval ID(Reference No.) is "SBRE-22-0602".

## AI Declaration

Generative AI tools have been applied solely to verify the grammar and refine the language of this paper. The content of this paper, which includes all data, concepts, research methods, research outcomes, research findings, citations and references was entirely developed or composed by the author.

## References

- Auerbach, C. F. & Silverstein, L. B. (2003) *Qualitative Data: An Introduction to Coding and Analysis*. New York University Press. ProQuest. eBook.
- Chan, et al. Independent learning in Need or in Crisis? Independent Learning Under the New Four-year Undergraduate Curriculum in Hong Kong." In the *Conference Proceedings of the 10th European Conference on e-Learning (ECEL-2011)*.
- Charmaz, K. (2024) *Constructing Grounded Theory (3rd ed.)*. Thousand Oaks: SAGE Publications Ltd
- Chao, F. et al. (2023) Preliminary Findings of the Needs Perceived and Expectations of Users of an Independent Learning Centre Survey in Hong Kong: What do They Tell Us? In the *Conference Proceedings and Abstracts of the 22nd European Conference on e-Learning (ECEL2023)*, P.39-50.
- Flick U. (2018) Triangulation and Mixed methods. In *The SAGE Handbook of Qualitative Data Collection*. Los Angeles: SAGE Publications Ltd. eBook.
- Krueger, R. A., & Casey, M. A. (2009) *Focus groups: A practical guide for applied research (4th ed.)*. Thousand Oaks, California. SAGE Publications Ltd.
- Liamputtong, P. (2011) *Focus group methodology: principles and practices*. Los Angeles: SAGE Publications Ltd.
- Miles, M. B. et al. (2019) *Qualitative Data Analysis: A Methods Sourcebook (4th ed.)*. SAGE Publications Ltd. eBook.
- Morgan, D. L. (1997) *Focus groups as qualitative research (2nd ed.)*. Thousand Oaks, California: SAGE Publications Ltd.
- Ponton, M. K., & Rhea, N. E. (2006) Autonomous learning from a social cognitive perspective. *New Horizons in Adult Education and Human Resource Development*, 20(2), 38-49. <http://education.fiu.edu/newhorizons>

- Powell, R. A. et al. (1996) Focus groups in mental health research: enhancing the validity of user and provider questionnaires. *International Journal Social Psychiatry*, 42(3), 193-206.  
<https://doi.org/10.1177/002076409604200303>
- Wilkinson, S. (1998). Focus groups in health research: Exploring the meanings of health and illness. *Journal of Health Psychology*, 3(3), 329-348. <https://doi.org/10.1177/135910539800300304>
- Willems, A.S. & Lewalter, D. (2012) Self-Determination and Learning. In: Seel, N.M. (eds) *Encyclopedia of the Sciences of Learning*. New York: Springer.

## Appendix 1

### A survey for independent learning on CUHK

#### Focus-group study

#### Suggested discussion questions

##### Understanding of independent learning (30%)

1. Some say “being able to locate suitable resources or seek help when necessary” is part of independent learning. What do you think?
  - Follow-up question: Do you think an independent learner needs to learn how to evaluate their performance?
2. How do you evaluate the effectiveness of your independent learning? (e.g. good, fair, bad etc.)
  - Follow-up question: Have you had experience in learning independently at CUHK? If yes, can you describe it and share whether it was successful?
3. It has been said that “creativity” and “language skills” are not qualities a successful independent learner needs. Do you agree? Why or why not?
  - Follow-up question: How do you understand “disciplined”? Do you think being disciplined is necessary for successful independent learning?

##### Independent learning at CUHK (30%)

4. From 1 to 10, please rate (1 being the lowest and 10 being the highest) the independent learning atmosphere at CUHK. Using the same scale, how would you rate your independent learning motivation? Is there a difference between the two? Why or why not?
  - Follow-up question: Do you think there are sufficient independent learning elements in CUHK’s formal curriculum?
5. Some students prefer having more learning activities or getting access to more independent learning resources to being provided with more hardware. Do you agree? Why or why not?
  - Follow-up question: How do you understand “hardware”?
6. Do you think advanced technology (e.g. AR, VR, Metaverse or AI) can facilitate independent learning? Should CUHK provide more support in this area?
  - Follow-up question: Do you have experience using advanced technology (especially for educational purposes)? How do you feel about it?

##### The present and future of the ILC (30%)

7. Can you share with us your experience in using the learning support services provided by the ILC? Are you satisfied with our services? Why or why not?
  - Follow-up question: When did you start using ILC services (e.g. first or final year)? How often do you use our services?
8. Under the presupposition of independent learning, do you still expect face-to-face classes or on-site teaching support provided when you learn, or is online courses or self-access learning resources sufficient?
  - Follow-up question: Do you prefer the support to be provided individually or in group? Why?
9. What do you think about the future development of the ILC (e.g. any topic you are interested in, any type of learning support you would like to see)
  - Follow-up question: If the ILC intends to offer more support in academic writing or for postgraduate students (e.g. proposal, oral presentation and viva defense), will you support this? Why or why not?

Others (10%)

10. Do you have any other opinion on CUHK's independent learning or the present and future of the ILC?
  - Follow-up question: Is there anything that supports your independent learning from your faculty (or department) or college? Do you want to see more collaboration between them and the ILC? Why or who not?